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10/528,074

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Hugues Van Den Bergen

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EXAMINER

MCNALLY, DANIEL

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/528,074	Applicant(s) VAN DEN BERGEN ET AL.	
	Examiner DANIEL MCNALLY	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/7/2008 has been entered.

Claim Rejections - 35 USC § 102/103

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 22-24, 28, 29, 33, 34, 36, and 40-42 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Chevreux et al. (US4355077, newly cited, herein "Chevreux").

Chevreux discloses a method of making a translucent laminate. The method comprises providing a radiation curable composition, applying the radiation curable

Art Unit: 1791

composition to at least one side of a glass substrate, contacting a second glass substrate to the radiation curable material, irradiating the curable material to cure the material and form a bond between the glass substrates (column 1, lines 5-17; column 4, lines 30-44; column 9, line 46 - column 10, line 15). The radiation curable composition comprises a Component A, which is a photopolymerisable prepolymer which may comprise an acrylic acid, a derivative thereof, and olefinically unsaturated groups (column 5 – column 6, line 55) and a Component E which may be monomeric or oligomeric, and also comprises co-polymers of acrylates and methacrylates (column 7, line 61 – column 8, line 55). The curable composition is clear and colorless (column 1, lines 49-61; column 3, lines 42-53). One of ordinary skill would have readily appreciated that the composition of Chevreux is capable of providing an amount of “flame-retardant” to the laminate. Furthermore the composition disclosed by Chevreux comprises all of the required components claimed in claim 22 which result in a flame-retardant laminate, therefore it is inherent the composition of Chevreux is also flame-retardant because it comprises all of the required components. In the event that disclosure of Chevreux does not anticipate the claimed composition it would have been obvious to one of ordinary skill in the art at the time of invention to choose any composition from the list of possible compositions and components provided by Chevreux, including a polymer precursor having radiation curable acrylate functions.

With regard to claim 23, Chevreux discloses a composition, wherein the composition will add some amount of flame retarding to the laminate. Claim 23 does not provide any method steps that are preformed to further limit the method of making

the laminate. The composition of Chevreux comprises all of the required components of the claimed composition.

With regard to claim 24, Chevreux discloses the photopolymerisable prepolymer may comprise a substituted derivative of acrylic acid, which may be substituted with halogen, for example methacrylic acid which comprises methacrylic groups (column 6, lines 29-32). The composition of Chevreux comprises all of the required components of the claimed composition.

With regard to claim 28, Chevreux discloses the composition comprises monoethylenically or polyethylenically unsaturated monomers (column 7, line 61 - column 8, line 5; column 8, lines 32-40).

With regard to claim 29, Chevreux discloses the composition comprises acrylic acid, methacrylic acid, methylacrylates, and acrylates.

With regard to claim 33, Chevreux discloses the method produces a laminate having two glass sheets and a radiation curable flame-retardant composition between the sheets.

With regard to claim 34, Chevreux discloses the radiation curable composition comprises a Component A, which is a photopolymerisable prepolymer may comprise a substituted derivative of acrylic acid, which may be substituted with halogen, for example methacrylic acid which comprises methacrylic groups (column 6, lines 29-32) and Component E which may be monomeric or oligomeric, the component may comprise monoethylenically or polyethylenically unsaturated monomers and also comprise co-polymers of acrylates and methacrylates (column 7, line 61 – column 8,

Art Unit: 1791

line 55). The curable composition is clear and colorless (column 1, lines 49-61; column 3, lines 42-53). One of ordinary skill would have readily appreciated that the composition of Chevreux is capable of providing an amount of "flame-retardant" to the laminate. Furthermore the composition disclosed by Chevreux comprises all of the required components claimed in claim 22 which result in a flame-retardant laminate, therefore it is inherent the composition of Chevreux is also flame-retardant because it comprises all of the required components. In the event that disclosure of Chevreux does not anticipate the claimed composition it would have been obvious to one of ordinary skill in the art at the time of invention to choose any composition from the list of possible compositions and components provided by Chevreux, including a polymer precursor having radiation curable acrylate functions.

With regard to claim 36, Chevreux discloses the composition comprises acrylic acid, methacrylic acid, methylacrylates, and acrylates.

With regard to claim 40, Chevreux discloses the composition is clear and colorless.

With regard to claim 41, Chevreux discloses the composition is radiation cured. Furthermore the composition of claim 41 is not limited to any particular method of producing the composition because the claim is an article/composition claim and not a method claim.

With regard to claim 42, Chevreux discloses the composition is clear and colorless.

5. Claims 22-25 and 33 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Couttenier (US6004413, newly cited, herein "Couttenier").

Couttenier discloses a method of making a translucent laminate. The method comprises providing a radiation polymerizable composition, placing the composition in a layer (7) on a glass plate (1), providing a second glass plate (9) over the layer (7), irradiating the layer (7) to cure the composition and bond the glass plates together (column 4, line 60 - column 5, lines 12). Couttenier discloses depending upon the resin used for the radiation polymerizable composition different characteristics can be added to the laminate, including fire-retarding (column 1, lines 6-22). Couttenier discloses the resin may comprise acrylic, methacrylic, and vinyl monomers. Couttenier discloses the composition forming the layer (7) can be phosphoric acid acrylate or methacrylate (column 7, lines 7-11). In the event that the disclosure of Couttenier does not anticipate the claimed method, it would have been obvious to one of ordinary skill in the art at the time of invention to select any of the compositions from the list of provided compositions of radiation curable materials as taught by Couttenier.

With regard to claim 23, Couttenier discloses the composition forming the layer (7) can have flame retardant properties.

With regard to claim 24, Couttenier discloses the composition forming the layer (7) can be phosphoric acid acrylate or methacrylate (column 7, lines 7-11).

With regard to claim 25, Couttenier discloses the composition forming the layer (7) can be phosphoric acid acrylate or methacrylate (column 7, lines 7-11).

With regard to claim 33, Couttenier discloses forming a laminate of two glass sheets with a flame-retardant radiation curable composition there between.

6. Claims 34-38 and 40-42 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Van Den Bergen et al. (WO 01/74826A1, of record, previously cited, herein "Van Den Bergen").

Van Den Bergen discloses a radiation curable flame-retardant composition. The composition comprises at least one radiation curable phosphorous substituted polymer precursor providing flame retardant properties to the cured composition (pages 10 - 11, lines 1-5). It is noted that the composition of Van Den Bergen preferably comprises an acrylate moiety (page 13, lines 35-36). The polymerisable composition may also comprise a vinyl group. The composition may also comprise phosphorus containing monomers (page 18). In the event that the disclosure of Van Den Bergen does not anticipate the claim, it would have been obvious to one of ordinary skill in the art at the time of invention to select any of the components for the radiation curable flame-retardant composition from the list of suitable components taught by Van Den Bergen.

With regard to claim 35-37, Van Den Bergen discloses that the radiation curable polymer precursor provides flame retardant properties to the cured composition, comprises one or more radiation curable phosphorus containing polymer precursors which have, at the chain ends or laterally along the chain, acrylic, methacrylic, or vinyl groups, wherein the radiation curable polymer comprises phosphorus containing urethane acrylate, and wherein the composition contains a radiation curable monomer

Art Unit: 1791

which is phosphorus containing to contribute to flame retardant properties of the cured composition.

With regard to claim 38, Van Den Bergen discloses the flame retardant polymer precursor comprises 9,10-dihydro-9-oxa-10-phosphaphenanthrene-10-oxide as an additional flame retardant additive (page 46, line 13).

With regard to claim 40, it is inherent the composition of Van Den Bergen is translucent because the composition of Van Den Bergen is the same as the claimed composition.

With regard to claim 41, Van Den Bergen discloses the composition is radiation cured. Furthermore the composition of claim 41 is not limited to any particular method of producing the composition because the claim is an article/composition claim and not a method claim.

With regard to claim 42, it is inherent the composition of Van Den Bergen is translucent because the composition of Van Den Bergen is the same as the claimed composition.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 22-26, 28-30, 33-38, and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chevreux in view of Van Den Bergen.

Chevreur discloses a method of making a translucent laminate. Applicant is referred to paragraph 4 for a detailed discussion of Chevreux. In the event that the disclosure of Chevreux does not anticipate the claimed invention because Chevreux does not explicitly recite flame-retardance as one of the properties of the composition the following rejection would apply.

Van Den Bergen discloses a radiation curable flame-retardant composition. Applicant is referred to paragraph 6 for a detailed discussion of Van Den Bergen. Van Den Bergen discloses the composition used has utility as an adhesion promoter and a flame retardant (page 40).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Chevreux by using the flame-retardant composition of Van Den Bergen in order to improve the performance of the glass laminate as a fire barrier.

With regard to claim 23, Chevreux discloses a composition, wherein the composition will add some amount of flame retarding to the laminate. Claim 23 does not provide any method steps that are preformed to further limit the method of making the laminate. The composition of Chevreux comprises all of the required components of the claimed composition. Van Den Bergen discloses the composition comprises a flame retardant radiation curable polymer precursor which provides flame retardant properties to the cured composition.

With regard to claim 24, Van Den Bergen discloses that the radiation curable polymer precursor provides flame retardant properties to the cured composition,

Art Unit: 1791

comprises one or more radiation curable phosphorus containing polymer precursors which have, at the chain ends or laterally along the chain, acrylic, methacrylic, or vinyl groups, wherein the radiation curable polymer comprises phosphorus containing urethane acrylate, and wherein the composition contains a radiation curable monomer which is phosphorus containing to contribute to flame retardant properties of the cured composition.

With regard to claim 25, Van Den Bergen discloses that the radiation curable polymer precursor provides flame retardant properties to the cured composition, comprises one or more radiation curable phosphorus containing polymer precursors which have, at the chain ends or laterally along the chain, acrylic, methacrylic, or vinyl groups.

With regard to claim 26, Van Den Bergen discloses the composition contains a radiation curable monomer which is phosphorus containing to contribute to flame retardant properties of the cured composition.

With regard to claim 28, Van Den Bergen discloses the composition comprises ethylenically unsaturated monomers.

With regard to claim 29, Chevreux and Van Den Bergen disclose the composition comprises acrylic acid, methacrylic acid, methylacrylates, and acrylates.

With regard to claim 30, Van Den Bergen discloses including magnesium oxide, i.e. and additive that is not a copolymerizable, non reactive, inorganic compound contributing to the flame retardant properties (page 46, line 22).

Art Unit: 1791

With regard to claim 33, Chevreux discloses the method produces a laminate having two glass sheets and a radiation curable flame-retardant composition between the sheets.

With regard to claim 34, applicant is referred to the discussion in above paragraphs 4 and 6.

With regard to claim 35-37, Van Den Bergen discloses that the radiation curable polymer precursor provides flame retardant properties to the cured composition, comprises one or more radiation curable phosphorus containing polymer precursors which have, at the chain ends or laterally along the chain, acrylic, methacrylic, or vinyl groups, wherein the radiation curable polymer comprises phosphorus containing urethane acrylate, and wherein the composition contains a radiation curable monomer which is phosphorus containing to contribute to flame retardant properties of the cured composition. Chevreux discloses the composition comprises acrylic acid, methacrylic acid, methylacrylates, and acrylates.

With regard to claim 38, Van Den Bergen discloses the flame retardant polymer precursor comprises 9,10-dihydro-9-oxa-10-phosphaphenanthrene-10-oxide as an additional flame retardant additive (page 46, line 13).

With regard to claim 40, Chevreux discloses the composition is clear and colorless.

With regard to claim 41, Chevreux discloses the composition is radiation cured. Furthermore the composition of claim 41 is not limited to any particular method of

producing the composition because the claim is an article/composition claim and not a method claim.

With regard to claim 42, Chevreux discloses the composition is clear and colorless.

9. Claims 22-26, 28-30, 33-38, and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Couttenier in view of Van Den Bergen.

Couttenier discloses a method of making a translucent laminate. Applicant is referred to paragraph 5 for a detailed discussion of Couttenier. Couttenier discloses the composition may comprise components that make the composition flame retardant. However Couttenier does not explicitly disclose which components provide the flame retardant properties to the composition.

Van Den Bergen discloses a radiation curable flame-retardant composition. Applicant is referred to paragraph 6 for a detailed discussion of Van Den Bergen. Van Den Bergen discloses the composition used has utility as an adhesion promoter and a flame retardant (page 40). Van Den Bergen also identifies which of the components used in the composition provide flame-retardant properties.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Couttenier by using the flame retardant components as taught by Van Den Bergen in order to provide additional flame-retardant properties to the laminate.

With regard to claim 23, Couttenier discloses the composition forming the layer (7) can have flame retardant properties. Van Den Bergen discloses the composition

Art Unit: 1791

comprises a flame retardant radiation curable polymer precursor which provides flame retardant properties to the cured composition.

With regard to claim 24, Couttenier discloses the composition forming the layer (7) can be phosphoric acid acrylate or methacrylate (column 7, lines 7-11). Van Den Bergen discloses that the radiation curable polymer precursor provides flame retardant properties to the cured composition, comprises one or more radiation curable phosphorus containing polymer precursors which have, at the chain ends or laterally along the chain, acrylic, methacrylic, or vinyl groups, wherein the radiation curable polymer comprises phosphorus containing urethane acrylate, and wherein the composition contains a radiation curable monomer which is phosphorus containing to contribute to flame retardant properties of the cured composition.

With regard to claim 25, Couttenier discloses the composition forming the layer (7) can be phosphoric acid acrylate or methacrylate (column 7, lines 7-11). Van Den Bergen discloses that the radiation curable polymer precursor provides flame retardant properties to the cured composition, comprises one or more radiation curable phosphorus containing polymer precursors which have, at the chain ends or laterally along the chain, acrylic, methacrylic, or vinyl groups.

With regard to claim 26, Van Den Bergen discloses the composition contains a radiation curable monomer which is phosphorus containing to contribute to flame retardant properties of the cured composition.

With regard to claim 28, Van Den Bergen discloses the composition comprises ethylenically unsaturated monomers.

With regard to claim 29, Van Den Bergen discloses the composition comprises acrylic acid, methacrylic acid, methylacrylates, and acrylates.

With regard to claim 30, Van Den Bergen discloses including magnesium oxide, i.e. and additive that is not a copolymerizable, non reactive, inorganic compound contributing to the flame retardant properties (page 46, line 22).

With regard to claim 33, Couttenier discloses forming a laminate of two glass sheets with a flame-retardant radiation curable composition there between.

With regard to claim 34, applicant is referred to the discussion in above paragraphs 5 and 6.

With regard to claim 35-37, Van Den Bergen discloses that the radiation curable polymer precursor provides flame retardant properties to the cured composition, comprises one or more radiation curable phosphorus containing polymer precursors which have, at the chain ends or laterally along the chain, acrylic, methacrylic, or vinyl groups, wherein the radiation curable polymer comprises phosphorus containing urethane acrylate, and wherein the composition contains a radiation curable monomer which is phosphorus containing to contribute to flame retardant properties of the cured composition.

With regard to claim 38, Van Den Bergen discloses the flame retardant polymer precursor comprises 9,10-dihydro-9-oxa-10-phosphaphenanthrene-10-oxide as an additional flame retardant additive (page 46, line 13).

With regard to claim 40, Couttenier discloses the composition is translucent but can be colored.

With regard to claim 41, Couttenier discloses the composition is radiation cured. Furthermore the composition of claim 41 is not limited to any particular method of producing the composition because the claim is an article/composition claim and not a method claim.

With regard to claim 42, Couttenier discloses the composition is translucent but can be colored.

10. Claims 27 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over either one of (a) Chevreux (b) Couttenier (c) Chevreux and Van Den Bergen or (d) Couttenier and Van Den Bergen, and further in view of Vollkommer et al. (US4128709, of record, previously cited, herein "Vollkommer").

Either one of (a) Chevreux (b) Couttenier (c) Chevreux and Van Den Bergen or (d) Couttenier and Van Den Bergen, discloses a method and composition for forming a glass laminate. Applicant is referred to paragraphs 4, 5, 8 and 9 for a detailed discussion of the references. The references are silent as to the composition comprising pentabromobenzylacrylate.

Vollkommer discloses an acrylate based polymer used as a flame-proofing agent. Vollkommer discloses using pentabromobenzylacrylate to prevent "chalking out" and to provide fire-retardant properties (column 1, lines 62-67; column 2, lines 8-11; column 5, lines 34-35; column 6, lines 8-9 and 22-24)

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the method and composition of the references referred to paragraphs 4, 5, 8 and 9 by including a pentabromobenzylacrylate in the radiation

curable composition as taught by Vollkommer in order to prevent chalking out and to provide additional flame-retardant materials between the glass.

11. Claims 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over either one of (a) Chevreux (b) Couttenier (c) Chevreux and Van Den Bergen or (d) Couttenier and Van Den Bergen, and further in view of Takahashi (US4126593, of record, previously cited, herein "Takahashi") and Wu et al. (US5460872, of record, previously cited, herein "Wu").

Either one of (a) Chevreux (b) Couttenier (c) Chevreux and Van Den Bergen or (d) Couttenier and Van Den Bergen, discloses a method and composition for forming a glass laminate. Applicant is referred to paragraphs 4, 5, 8 and 9 for a detailed discussion of the references. Van Den Bergen discloses including magnesium oxide, i.e. and additive that is not a copolymerizable, non reactive, inorganic compound contributing to the flame retardant properties (page 46, line 22). The other references are silent as to using inorganic oxides that are nanoparticles that are functionalized with acrylate or methacrylate functions.

Takahashi teaches coating an ester onto inorganic hydroxide powder to eliminate silver streaks that form because the uncoated powder is hygroscopic (column 3, lines 2-3; column 4, lines 6-7, 17-20, 45).

Wu teaches that emulsions comprising 0.01-0.1 micrometer particles of methacrylates have several advantages over conventional dispersion of methacrylates, including better transparency (column 1, lines 57-60; column 2, lines 27-28, 45-46).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of the references referred to paragraphs 4, 5, 8 and 9 to use nanoparticles coated with methacrylate as taught by Takahashi and Wu to improve transparency of the composition.

Response to Arguments

12. Applicant's arguments with respect to claims 22-42 have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments focused on Nolte (previously applied art) and the motivation for combining the teachings of the secondary references (Van Den Bergen, Vollkommer, Takasi, Takahashi and Wu) with Nolte. The arguments directed toward Nolte and any combinations including Nolte are moot, as Nolte is no longer relied upon in the art rejections. Newly cited Chevreux and Couttenier disclose the bonding method as broadly recited in the independent method claims. The newly cited art is also relied upon in the rejection of the remaining claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL MCNALLY whose telephone number is (571)272-2685. The examiner can normally be reached on Monday - Friday 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1791

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel McNally/
Examiner, Art Unit 1791

/John L. Goff/
Primary Examiner, Art Unit 1791

/DPM/
July 30, 2008